

# LAND USE PLAN

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The purpose of the Land Use Plan is to bring about the public understanding of the need for orderly arrangement of the community, for separating the incompatible land uses, and for optimizing business and industrial opportunities.

### Land Use Projection

The projected growth pattern of Firth is an indication of the amount of land that will be required for development within the planning period. It is based on the assumption that the Village will continue to be a bedroom community, and serve the surrounding rural area as business and service center.

Land use is also projected on the basis of the relationship existing between the amount of the land used and the population served. These ratios, expressed in terms of acres per 100 persons, were applied to the future population to develop the required acreages of land to serve the 1990 population. In the land use plan, future population was distributed to vacant land at densities compatible with surrounding area, and land use ratios applied to produce the necessary amount of land uses to serve the projected population. The land use assignment was then adjusted to assure that an over assignment had not been made.

Table 15 shows the developed land use ratios expressed in acres per 100 population inside the corporate limits of Firth. It compares the land use data of Firth with those of eleven cities under 1000 in Nebraska. As indicated in the table, Firth uses 33.7 acres per 100 population as compared to 26.1 acres for eleven cities under 1000. The difference is attributed to greater amount of land used for single family, railroad and streets. The greater amount of land used for residential is due to the relative spacious development and many vacant lots present in the Village. The original platting of land into short, square blocks has created an acreage of streets which exceeds need, and this kind of platting is largely responsible for the large acreage of streets.

Based on the knowledge of the existing land use, changing street patterns, modern subdivision design, ratios were adjusted for future planning purposes.

Table 16 indicates the land use projection by category. Column three shows the number of acres of land needed per 100 population in 1990. Column five shows the probable number of acres required by Firth based on the projected population of 469 in 1990.

Table 15

DEVELOPED LAND USE RATIOS  
ACRES PER 100 POPULATION

<u>Land Use</u>	<u>Inside Firth Corporate Limits</u>	<u>Average for Cities Under 1000 in Nebraska*</u>	<u>Adjusted Ratios for Land Use Projections</u>
Single Family	10.4	8.6	10.4
Commercial	0.8	1.0	1.0
Public & Semi-Public	1.1	2.8	2.8
Parks & Recreation	1.4	1.0	2.0
Industrial	0.9	1.0	2.0
Railroad	4.2	2.1	2.1
Streets & Alleys	<u>14.9</u>	<u>9.6</u>	<u>8.0</u>
TOTAL	33.7	26.1	28.3

\*These cities include Nelson, Hooper, Blue Hill, Shelton, Winnebago, Crofton, Elkhorn, Sargent, Oxford, Friend and Greeley.

Table 16

## 1990 LAND USE PROJECTION

<u>Land Use</u>	<u>Present City Area in Acres</u>	<u>Acres of Land Used Per 100 Persons in 1990</u>	<u>Acres Added by 1990</u>	<u>Acres Required by 1990</u>
Single Family	34.4	10.4	14.5	48.9
Commercial	2.8	1.0	1.4	4.2
Public & Semi-Public	3.5	2.8	3.9	7.4
Parks & Recreation	4.5	2.0	2.8	7.3
Industrial	3.1	2.0	2.8	5.9
Railroad	14.0	2.1	2.9	16.9
Streets & Alleys	<u>49.0</u>	<u>8.0</u>	<u>11.1</u>	<u>60.1</u>
TOTAL	111.3	28.3	39.4	150.7

### Land Use Plan

The 1990 generalized land use plan is shown on Illustration 11. The plan calls for the expansion of residential area north of county road 395; the development of the Firth Lake recreation area on the east; and the reservation of an industrial tract west of the railroad. The expansion to the south is discouraged because of the Nemaha River and the sewage pond. In developing the Land Use Plan, close attention has been given to the topography, natural and man-made barriers, drainage, and utilities, so that the use of existing utilities can be optimized and the expansion of the Village can be most economical.

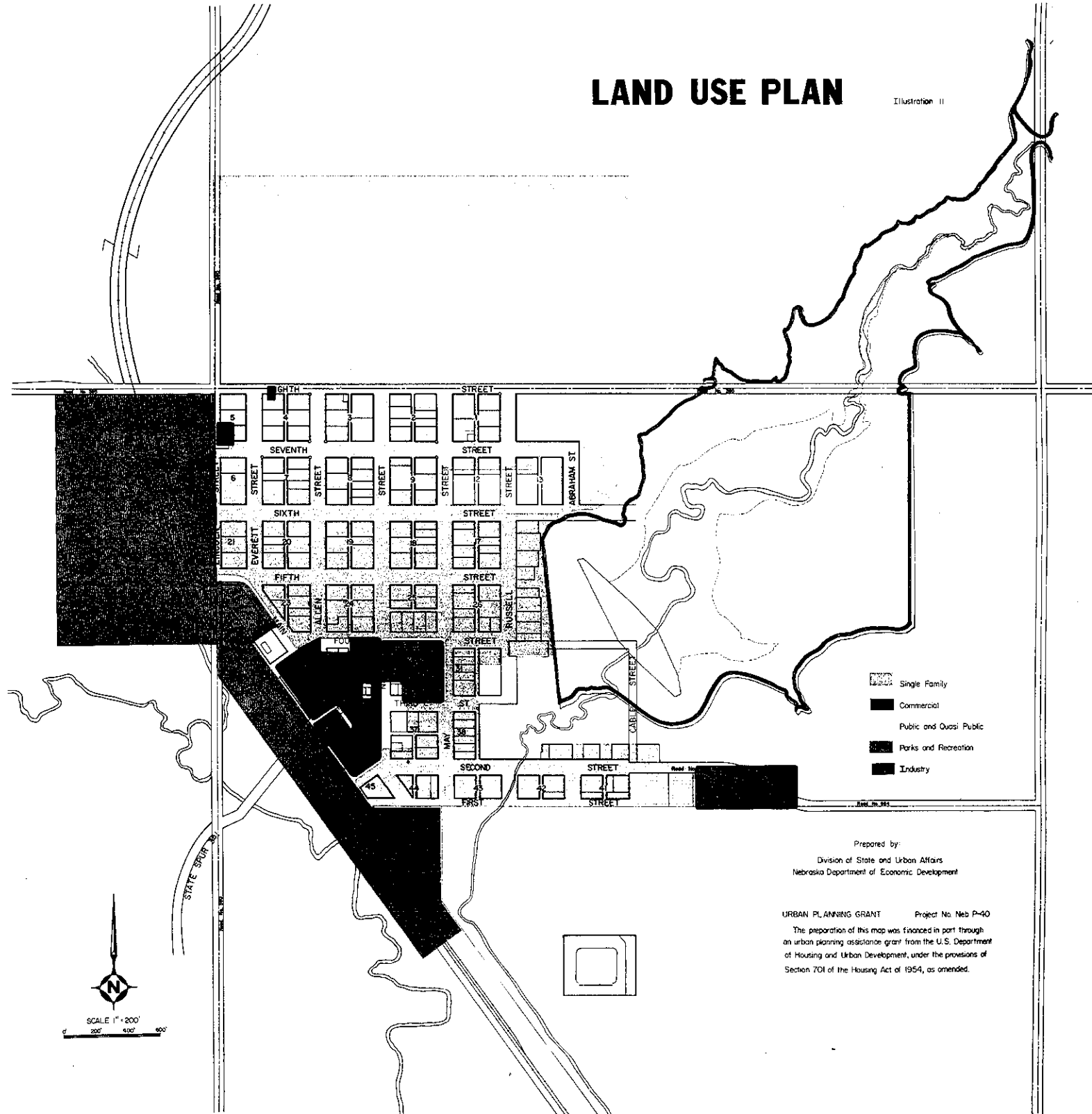
Before the expansion to the north, single family use should be encouraged to fill the vacant residential lots because utilities are readily available to these properties. The filling in the development should continue throughout the town until the various areas reached about 80% developed. Single family acreage per 100 persons is expected to remain 10.4 since the lot sizes are now comparatively large and residential density rather low. Using this 10.4 ratio, it is found that 14.5 additional acres will be needed by 1990. The land north of county road 395 is a relatively flat area, and is now vacant. New subdivision design technique can be employed to insure the optimum use of land.

It is anticipated that there will be no multi-family use in the next 20 years due to the rural character of the community. But if there is such a need, multi-family units or duplexes should be encouraged to locate near or adjoining the Central Business District to serve as a buffer zone. This will tend to preserve the property value of the adjacent single family units, and to better serve the commercial uses by walk-in trade from the high-density residential areas.

Additional commercial acreage will also be required to serve the future needs. According to the land use projection, a total of 4.2 acres of commercial land will be required. There are two alternatives to meet such a requirement. The first is to expand the Central Business District to its west and south directions where there are vacant lots. The second is to relocate the entire downtown commercial area to the new area north of the community.

# LAND USE PLAN

Illustration II



A detailed layout for downtown improvement will be presented in the Central Business District Study.

Industrial acreage will rise from 1 acre per 100 population to 2 acres as the trend is for industry to locate in larger tracts with landscaping and ample parking spaces. In addition to the existing industrial land along the railroad, an industrial tract was chosen west of the railroad and south of the county road. This site is ideal for industry because it is relatively flat and has easy access to railroad and highway, and utilities are readily available.

The Firth Lake recreation area will provide more than adequately for the needs of park and recreation in the next 20 years. It would be desirable if the Village will annex this area so that proper maintenance and control can be achieved.

The future needs for streets and alleys should be kept to a minimum. Using the new techniques of subdivision layout, it is anticipated that 11.1 additional acres will be needed in 1990.

Based upon the projected land uses, a total of 150.7 acres of land will be required by 1990. If the Firth Lake is annexed, the total area in the corporate limits will be about 231.2 acres.